

A Perspective Approach of Community Medicine in Corona Virus Disease (COVID 19)

Prof. Dr. Anup Kumar Das¹, Dr. Humani Sharma², Dr. Hitarth Mehta³

¹HOD, ²Assistant Professor, ³Principal,

^{1,2,3}Department of Community Medicine, Rajkot Homoeopathic Medical College, Parul University, Gujarat, India

ABSTRACT

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 coronavirus, which has spread rapidly across the world. The World Health Organization (WHO) proclaimed the COVID-19 outbreak a pandemic in March 2020. The pandemic has wreaked havoc on global health systems, as well as economic and social development. The rate of transmission is relatively high. As a result, regardless of vaccine history or previous infection, the CDC recommends that anyone with any signs or symptoms of COVID-19 be checked. Everyday Preventive Actions, as well as having the Covid 19 Vaccine when it is safe, will protect you and your loved ones.

KEYWORDS: Coronavirus, WHO, Pandemic, CDC, Vaccine

How to cite this paper: Prof. Dr. Anup Kumar Das | Dr. Humani Sharma | Dr. Hitarth Mehta "A Perspective Approach of Community Medicine in Corona Virus Disease (COVID 19)"

Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-5 | Issue-4, June 2021, pp.1611-1616, URL: www.ijtsrd.com/papers/ijtsrd43677.pdf



IJTSRD43677

Copyright © 2021 by author (s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0/>)



INTRODUCTION

Coronavirus disease 2019 (COVID-19) is an illness caused by a novel coronavirus known as serious acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly known as 2019-nCoV), which was first detected in Wuhan City, Hubei Province, China, during an outbreak of respiratory illness cases. On December 31, 2019, it was first confirmed to the World Health Organization (WHO).

The WHO declared the COVID-19 outbreak a global health emergency on January 30, 2020. COVID-19 was declared a global pandemic by the WHO on March 11, 2020, the first time since H1N1 influenza was declared a pandemic in 2009.

The WHO designated SARS-CoV-2-related illness as COVID-19, an acronym derived from "coronavirus disease 2019." To avoid stigmatising the virus's roots in terms of populations, geography, or animal associations, the name was selected. The International Committee on Virus Taxonomy of Viruses' Coronavirus Study Group released a statement on February 11, 2020, announcing an official classification for the novel virus: extreme acute respiratory syndrome coronavirus 2. (SARS-CoV-2).

Coronaviruses are naturally divided into four groups that cause gastrointestinal and respiratory infections: Gammacoronavirus, Deltacoronavirus, Betacoronavirus, and Alphacoronavirus. The first two types primarily affect birds, while the third and fourth types primarily affect mammals.

What Is COVID-19?

Corona Viruses are common viruses that cause infections in the nose, sinuses, and upper throat. SARS-CoV-2 is one of seven coronaviruses that can cause serious illnesses such as Middle East respiratory syndrome (MERS) and sudden acute respiratory syndrome (SARS). The other coronaviruses are responsible for the majority of the colds we get during the year, but they aren't a significant threat to otherwise safe people.

A Chinese analysis of 103 COVID-19 cases discovered two strains, dubbed L and S. Although the S type is older, the L type was more prevalent during the outbreak's early stages. They believe one is more likely to trigger the disease than the other, but they're still figuring out what that means.

A virus's ability to alter or mutate as it infects people is also natural, and this virus has done so. There are many varieties named after the regions where they were found, but they have now spread to other areas and countries.

Risk Factors

Anyone can get COVID-19, and most infections are mild. The older you are, the higher your risk of severe illness.

You also have a higher chance of serious illness if you have one of these health conditions:

- Chronic kidney disease
- Chronic obstructive pulmonary disease (COPD)
- A weakened immune system because of an organ transplant
- Obesity

- Serious heart conditions such as heart failure or coronary artery disease
- Sickle cell disease
- Type 2 diabetes

Conditions that could lead to severe COVID-19 illness include:

- Moderate to severe asthma
- Diseases that affect your blood vessels and blood flow to your brain
- Cystic fibrosis
- High blood pressure
- A weakened immune system because of a blood or bone marrow transplant, HIV, or medications like corticosteroids
- Dementia
- Liver disease
- Pregnancy
- Damaged or scarred lung tissue (pulmonary fibrosis)
- Smoking
- Thalassemia
- Type 1 diabetes

Some COVID-19-infected children and teenagers develop an inflammatory disorder known as multisystem inflammatory syndrome in children, according to physicians. Doctors believe it has everything to do with the virus. It has signs that are similar to toxic shock and Kawasaki disease, which induces inflammation in the blood vessels of children.

Symptoms

The main symptoms include:

- Fever
- Coughing
- Shortness of breath
- Trouble breathing
- Fatigue
- Chills, sometimes with shaking
- Body aches
- Headache
- Sore throat
- Congestion/runny nose
- Loss of smell or taste
- Nausea
- Diarrhoea

Pneumonia, respiratory failure, cardiac disease, liver problems, septic shock, and death may all be caused by the virus. A disorder known as cytokine release syndrome or a cytokine storm can be the cause of several COVID-19 complications. This happens when an infection causes the

immune system to release inflammatory proteins called cytokines into your bloodstream. They have the ability to destroy tissue and damage your organs.

Get medical attention right away if you or a loved one exhibits the following serious symptoms:

- Trouble breathing or shortness of breath
- Ongoing chest pain or pressure
- New confusion
- Can't wake up fully
- Bluish lips or face

Strokes have also been reported in some people who have COVID-19. Remember FAST:

- **Face.** Is one side of the person's face numb or drooping? Is their smile lopsided?
- **Arms.** Is one arm weak or numb? If they try to raise both arms, does one arm sag?
- **Speech.** Can they speak clearly? Ask them to repeat a sentence.
- **Time.** Every minute counts when someone shows signs of a stroke. Call 911 right away.

If you've been infected, signs will appear in as few as two days or as many as fourteen. It differs from one individual to the next.

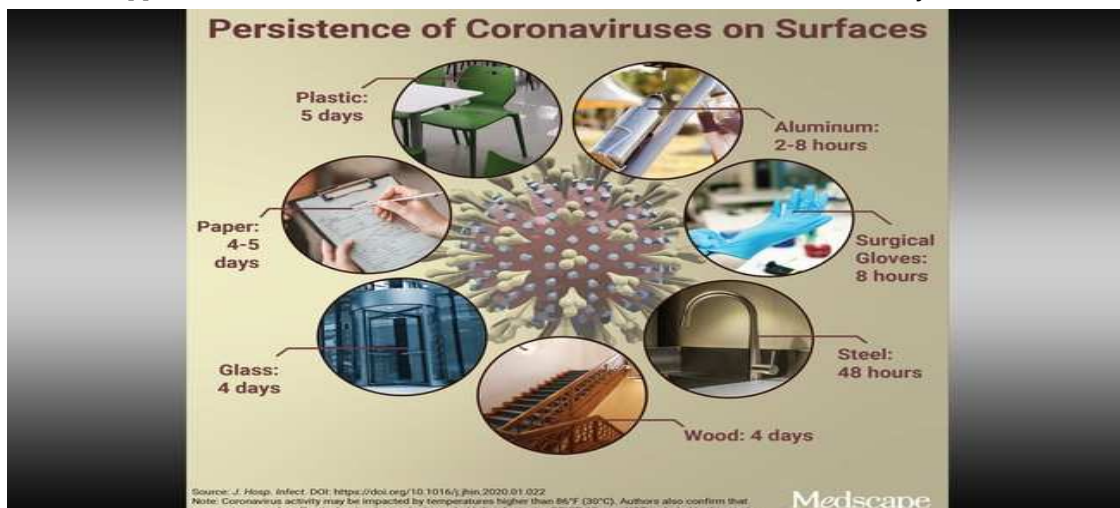
These were the most common symptoms among people who had COVID-19, according to Chinese researchers:

- Fever 99%
- Fatigue 70%
- Cough 59%
- Lack of appetite 40%
- Body aches 35%
- Shortness of breath 31%
- Mucus/phlegm 27%

Some COVID-19 patients have dangerous blood clots in their legs, lungs, and arteries, which necessitate hospitalisation.

Transmission

The virus, SARS-CoV-2, primarily spreads from person to person. When a sick person coughs or sneezes, it usually spreads. They have the ability to spray droplets up to 6 feet away. The virus will enter your body if you breathe them in or swallow them. And if certain people with the virus have no symptoms, they can still transmit it. You may also contact the virus by touching a virus-infected surface or object and then touching your mouth, nose, or eyes. Most viruses can survive for several hours on any surface they come into contact with. According to a review, SARS-CoV-2 can survive for several hours on a variety of surfaces:



As a result, disinfecting surfaces is critical for eradicating the virus.

The virus has been found in some dogs and cats. Just a few have shown symptoms of disease. While there is no proof that humans can contract this coronavirus from an animal, it appears that it can be transmitted from humans to animals.

Community Spread

When doctors and health officials are unsure of the source of an infection, they use this word. When it comes to COVID-19, it normally applies to someone who contacts the virus despite not having travelled outside of the country or been exposed to someone who has travelled abroad or has COVID-19. The CDC reported a COVID-19 infection in California in February 2020 in someone who had not travelled to an infected area or been exposed to someone who had the disease. This was the first time in the United States that a culture spread. That person was most likely exposed to someone who was contaminated but didn't realise it. This form of event has also occurred with the variants.

Contagious

The rate of transmission is very high. According to preliminary research, one person who has it will spread it to between 2 and 3.5 other people. According to one report, the prevalence was higher, with one case infecting between 4.7 and 6.6 people. In contrast, one person infected with the seasonal flu will infect between 1.1 and 2.3 people. According to the CDC, there is evidence that it can be spread if you spend 15 minutes within 6 feet of someone who is infected. Previously, it was thought that the exposure had to be done in 15-minute increments.

COVID-19 is much more likely to be acquired from someone else than from shipments, groceries, or food. Stay at home and use a delivery service or have a friend shop for you if you're in a high-risk group. If possible, have them leave the things outside your front door. Carry a cloth face mask and aim to keep at least 6 feet away from other shoppers if you do your own shopping.

Before and after taking stuff into your house, wash your hands for at least 20 seconds. Since the coronavirus will linger on hard surfaces, disinfect countertops and everything else your bags have come into contact with. If you like, you can clean plastic, metal, or glass packaging with soap and water.

There is no suggestion that COVID-19 was acquired by food or food containers.

Diagnosis

Types of tests

COVID-19 tests are available that can test for current infection or past infection.

- A viral test tells you if you have a current infection. Two types of viral tests can be used: nucleic acid amplification tests (NAATs) and antigen tests.
- An antibody test (also known as a serology test) might tell you if you had a past infection. Antibody tests should not be used to diagnose a current infection.

Who should get tested for current infection

- People who have COVID-19 signs.
- Most people who have had near contact with someone with reported COVID-19 (within 6 feet for a total of 15 minutes or more over a 24-hour period).

- People who have been fully vaccinated and have no signs of COVID-19 do not need to be screened after being exposed to someone who has COVID-19.
- People who have tested positive for COVID-19 during the last three months and recovered do not need to be tested again if they do not experience new symptoms after an exposure.
- People who have participated in activities that expose them to COVID-19 because they are unable to physically isolate themselves as required to prevent exposure, such as travel, large social or mass gatherings, or being in crowded or poorly ventilated indoor environments.
- People who have been requested or referred by their healthcare provider, state, tribal, local external symbol, or territorial health department to get checked.
- Anyone with any signs or symptoms of COVID-19 should be screened, regardless of vaccine status or previous infection, according to the CDC. If you get tested because you have symptoms or think you may have been exposed to the virus, you should stay away from others until your test results come back and follow the advice of your doctor or a public health professional.

How to get tested for current COVID-19 infection

For the most up-to-date local details on testing, contact your healthcare provider or go to the websites of your national, tribal, local external symbol, and territorial health departments. The types of viral COVID-19 tests available can vary depending on where you are. If you have signs and symptoms of COVID-19 and can't get checked by a healthcare provider or public health official, you and your healthcare provider may need an at-home collection kit or an at-home exam.

How to use results of viral tests

If you test positive, know what precautions to take to avoid infecting others; if you test negative, you were most likely not contaminated at the time your sample was taken. The test result simply indicates that you were not infected with COVID-19 at the time of the test. Continue to take precautions to safeguard yourself.

Laboratory Tests

Complete blood count-lymphopenia, eosinopenia, and neutrophil/lymphocyte ratio ≥ 3.13 are related to greater severity and worse prognosis. Thrombocytopenia is related to a higher risk of myocardial damage and a worse prognosis. Lymphopenia results from a multifactorial mechanism that includes the cytopathic effect of the virus, induction of apoptosis, IL1-mediated pyroptosis, and bone marrow suppression by inflammatory cytokines.

High values of C-reactive protein (CRP), ferritin, D-dimer, procalcitonin, lactic dehydrogenase (DHL), prothrombin time, activated partial thromboplastin time, amyloid serum protein A, creatine kinase (CK), glutamic-pyruvic transaminase (SGPT), urea, and creatinine are risk factors for more severe disease, thromboembolic complications, myocardial damage, and/or worse prognosis.

Immunological markers that may also represent risk factors for greater severity and/or worse prognosis are: decreased values of CD4 + T and CD8+ lymphocytes, and NK cells and increased values of IL6, IL-8, IL-10, IFN- γ , TNF-IL-2R, TNF- α , GM-CSF, and IL-1 β

Imaging tests

Imaging tests for the diagnosis of COVID-19 have gained relevance, given the unavailability of tests for etiological diagnosis. Although the findings in these tests are not specific to COVID-19, given a compatible clinical picture and/or the presence of confirmed or possible history of contact, they may help in the diagnosis.

Plain chest X-rays are less sensitive than computed tomography, but may evidence sparse bilateral consolidations accompanied by ground glass opacities, peripheral/subpleural images, predominantly in the lower lobes.

Computed tomography of the chest presents greater sensitivity and reveals multifocal, bilateral, peripheral/subpleural ground glass opacities, generally affecting the posterior portions of the lower lobes, with or without associated consolidations.

Pulmonary ultrasonography has good sensitivity; the typical findings are B-lines, consolidations and pleural thickening. The advantages of this method are its lower cost, absence of radiation exposure, and the fact that it does not require sedation or transportation of unstable patients

The gold standard for the diagnosis of SARS-CoV-2 infection is the identification of viral genetic material by RT-PCR, in different samples, with greater sensitivity in bronchoalveolar lavage and nasopharyngeal swab.

Treatment

If your symptoms are mild enough to recover at home, you can do the following:

- Rest. It will help you feel better and has the potential to speed up your recovery.
- Remain at home. Do not go to work, school, or any other public location.
- Stay hydrated. When you're ill, you lose more fluids. Dehydration can exacerbate symptoms and lead to other health issues.
- Keep an eye on things. Call your doctor right away if your symptoms worsen. Do not visit their office without first contacting them. They can advise you to stay at home or take extra precautions to protect staff and other patients.
- Consult your doctor for over-the-counter medications, such as acetaminophen, which can help reduce your fever.

The most important thing to remember is to avoid infecting others, especially those over 65 or with other health issues.

That is to say, try to remain in one spot in your house. If possible, use a separate bedroom and bathroom.

- Inform someone that you are ill so that they keep their distance.
- Use a tissue or your forearm to cover your coughs and sneezes.
- If possible, cover the nose and mouth with a mask.
- Wash your hands, particularly your hands, on a regular basis.
- Don't let someone else use your plates, cups, eating utensils, sheets, or bedding.

- Wipe down common surfaces such as doorknobs, counters, and tabletops.

What to expect

- Symptoms appear 2 to 14 days after you are exposed to the virus. Early research suggests that many people with minor infections recover within two weeks. Extreme cases will last anywhere from 3 to 6 weeks. If you have symptoms, talk to your doctor about how long you can separate yourself. When all of these are valid, according to CDC guidelines, you can leave isolation: You haven't had a fever for 3 days. The respiratory symptoms, such as coughing or shortness of breath, have improved in the last three days. It's been at least 10 days since the symptoms started OR you've had two consecutively negative COVID-19 tests.

How do you know if your symptoms are getting worse?

If you start to experience any of the following symptoms, seek medical attention right away.

- Difficulty breathing • Chest pain or pressure • Confusion or extreme drowsiness • A blue hue to your lips or face.

Mild cases (non-pneumonia and mild pneumonia) accounted for 80.9 percent of COVID-19 confirmed cases.

NOTE: These cases involved patients with a wide range of illnesses, including fever, cough, chest pain, nausea, and body pain, among others. 13.8 percent of confirmed COVID-19 patients had severe symptoms (dyspnea, respiratory frequency 30/min, blood O2 saturation 93 percent, PaO2/FiO2 ratio 300, lung infiltrates >50 percent within 24–48 hours).

Critical (respiratory failure, septic shock, and/or multiple organ dysfunction or failure, death) patients accounted for 4.7 percent of confirmed COVID-19 patients. Of the 2,087 critically ill patients, 1,023 (49 percent) died.

Coronavirus Treatment in a Hospital

If you have basic COVID-19 symptoms including a moderate fever or cough, you don't need to go to the hospital or ER. Many hospitals will discharge you if you do so.

If the condition is extreme, medical personnel will look for signs that the disease is causing more serious issues. They could:

- Use a clip-on finger monitor to check the blood oxygen levels.
- Pay attention to the lungs.
- Perform a COVID-19 test on you. Using a 6-inch cotton swab, run it up both sides of your nose for about 15 seconds.
- Give a chest X-ray or CT scan for you.

Extra oxygen can be obtained by two tiny tubes inserted just within the nostrils. In the most critical situations, doctors will bind you to a ventilator, which is a machine that will breathe for you. You can also receive fluids through an IV in your arm to avoid being dehydrated. Your breathing will also be closely monitored by doctors. The goal is for your infection to clear up and for your lungs to recover enough so that you can breathe normally again.

Remdesivir, an antiviral drug, can be prescribed by your doctor (Veklury). Remdesivir is the first drug approved by the FDA for the treatment of COVID patients over the age of 12 who are hospitalised. According to studies, some patients recover more quickly after taking it. Remdesivir was developed to combat Ebola, but doctors can now use it against COVID-19 thanks to an emergency use ruling from the FDA. In addition, your doctor can prescribe medication to thin your blood and prevent clots.

Your doctor will advise you to keep taking angiotensin-converting enzyme (ACE) inhibitors, angiotensin receptor blockers (ARBs), or statins if you have any health issues. The FDA has granted two monoclonal antibodies drugs an emergency use authorization (EUA) to treat COVID-19. High-risk patients who have recently been diagnosed with mild to moderate illness should be given casirivimab or imdevimab to lower virus levels in their bodies and reduce the risk of hospitalisation. Many clinical trials are currently underway to investigate and refine new COVID-19 drugs that have been used to treat other diseases. In order to support patients with serious or life-threatening cases, the FDA is making clinical trials and hospital use of blood plasma from people who have recovered from COVID-19. This is referred to as convalescent plasma. Other drugs, such as tocilizumab, which has been used to treat autoimmune diseases and an inflammatory disorder known as cytokine release syndrome, are undergoing clinical trials. The FDA has revoked its emergency authorization for the use of hydroxychloroquine and chloroquine to treat COVID-19 patients who have been hospitalised, citing serious questions regarding their safety and effectiveness against the virus. The drugs have been licenced to treat malaria as well as autoimmune diseases such as rheumatoid arthritis and lupus. Dexamethasone, a common steroid drug, was found to benefit people who were hospitalised with serious COVID-19 complications in one study. However, the results are preliminary, and the researchers have not yet made the full study public.

Community Medicine approach in Prevention & Control Everyday Preventive Actions

There are many ways to stop COVID-19 infection from spreading. • Avoid rubbing your eyes, nose, and mouth • Avoid close contact with people who are sick, Remember that even people who do not show symptoms can spread the virus • Stay at home if you are sick. Use a towel to cover your cough or sneeze, and dispose of it properly. • If physical distancing is challenging or going into confined spaces, wear a face mask. A physical distance of at least 1 metre should be maintained (3

How to protect yourself & others:



Coronavirus Vaccine

On December 11, 2020, the FDA approved an emergency use authorization (EUA) for the Pfizer-BioNTech COVID-19 vaccine in the United States for people aged 16 and up. Within a week, the department had also given an EUA to a Moderna vaccine. In February 2021, the European Union approved Johnson & Johnson's single-shot vaccine.

➤ On December 8, 2020, the British government approved and began administering the Pfizer vaccine. Vaccines produced in China and Russia are now available in a variety of countries.

ft). • Constantly touched items and surfaces should be cleaned and disinfected. • Wash your hands with soap and water, or use an alcohol-based hand rub. The alcohol content of the hand rub should be at least 60%. Hand washing should last at least 40-60 seconds, according to WHO guidelines.

COVID-19: Infection Prevention & Control (IPC) Priorities

1. Rapid identification of suspect cases
 - A. Screening/Triage at initial healthcare facility encounter and rapid implementation of source control
 - B. Limiting the entry of healthcare workers and/or visitors with suspected or confirmed COVID-19
2. Immediate isolation and referral for testing
 - A. Group patients with suspected or confirmed COVID-19 separately
 - B. Test all suspected patients for COVID-19
3. Safe clinical management
 - A. Immediate identification of in patients and healthcare workers with suspected COVID-19
4. Adherence to IPC practices
 - A. Appropriate use of Personal protective equipment (PPE)

Standard precautions include:

- Hand hygiene
- Personal protective equipment
- Respiratory hygiene and cough etiquette
- Cleaning and disinfection of devices and environmental surfaces
- Safe injection practices
- Medication storage and handling
- Healthcare workers should:
 - Use a medical mask (i.e., at least a surgical/medical mask)
 - Wear eye protection (goggles) or facial protection (face shield)
 - Wear a clean, non-sterile, long-sleeve gown
 - Use gloves

- The Pfizer and Moderna vaccines both require two doses, spaced a few weeks apart, while the J & J vaccine only requires one injection. Initially, health-care staff and the elderly were given priority in obtaining the vaccines, but by mid-April, anyone over the age of 16 could receive them.
- These vaccines were produced at a breakneck pace, with human trials set to begin in March 2020. According to the FDA, no corners were cut in order to gain approval, and the vaccines are safe. According to the CDC, COVID-19 vaccination is safe for pregnant women, and there is no

evidence that antibodies generated by the vaccine cause problems during pregnancy.

- Other vaccines are currently undergoing clinical trials. Here are some resources for more details if you're interested in volunteering for a COVID-19 vaccine trial.

Government-sponsored sites:

- COVID-19 Prevention Network (COVID-19 Prevention Network) (CoVPN). The National Institute of Allergy and Infectious Diseases is funding the project, which is being coordinated by Seattle's Fred Hutchinson Cancer Research Center. Its mission is to enrol thousands of people in COVID vaccine trials across the country. This site is used by several research centres to find volunteers.
- Clinicaltrials.gov is a website that lists clinical trials. This is a government website that contains information on public and private clinical trials conducted around the world. The website frequently discusses the pros and cons of participating in a clinical trial.

The COVID-19 vaccines are being rolled out in India, and the communication strategy aims to disseminate timely, reliable, and straightforward information about the vaccine(s) to allay fears, ensure acceptance, and promote uptake. The strategy will also serve as a guide for national, state, and district communication activities, ensuring that information about the COVID-19 vaccinations and vaccination process reaches all citizens in all states by December 28, 2020, as mandated by MOHFW.

- Vaccines are designed to expose the body to an antigen and elicit an immune response that will block or destroy the virus if a person becomes infected later without causing disease. Various research approaches, such as the use of different viruses or viral parts¹⁰, are being developed as part of the global initiative to produce a safe and effective COVID-19 vaccine quickly. Virus vaccines, viral vector vaccines, nucleic acid vaccines, and protein-based vaccines are among the COVID-19 vaccines under production.

Get Vaccinated

- Authorized COVID-19 vaccines can help protect you from COVID-19.
- Two vaccines that have been granted emergency use authorization by the Central Drugs Standard Control Organization (CDSCO) in India are Covishield (AstraZeneca's vaccine manufactured by Serum Institute of India) and Covaxin (manufactured by Bharat Biotech Limited) (manufactured by Bharat Biotech Limited).
- You can get a COVID-19 vaccine as soon as it becomes available.

- Once you are completely vaccinated, you will be able to resume some of the activities you had put on hold due to the pandemic.

References;

- [1] Simon James Fong, Nilanjan Dey, Jyotismita Chaki, An Introduction to COVID-19, Artificial Intelligence for Coronavirus Outbreak. 2020 Jun 23: 1–22, Published online 2020 Jun 23. doi: 10.1007/978-981-15-5936-5_1, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7307707/>
- [2] CDC, COVID-19 Overview and Infection Prevention and Control Priorities in non-US Healthcare Settings, Updated feb. 26 2021. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/non-ussettings/overview/index.html#:~:text=Standard%20precautions%20include%3A,Hand%20hygiene,of%20devices%20and%20environmental%20surfaces>
- [3] CDC, How to protect yourself & Others, Updated Mar. 8, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>.
- [4] Ekaterini S. Goudouris, Laboratory diagnosis of COVID-19, Elsevier public health emergency collection, JPediatr (Rio J) 2021 January-February; 97(1): 7–12. Published online 2020 Aug 31. doi: 10.1016/j.jped.2020.08.001
- [5] WebMD, Coronavirus and COVID-19: What You Should Know, updates on the 2021, <https://www.webmd.com/lung/coronavirus>
- [6] Medscape, David J Cennimo, Coronavirus Disease 2019 (COVID-19), Updated: Apr 30, 2021 <https://emedicine.medscape.com/article/2500114-overview>.
- [7] MOHFW, Covid 19 Vaccination Communication Strategy, Updated Dec. 28, 2020, https://www.mohfw.gov.in/covid_vaccination/vaccination/important-information.html.
- [8] MOHFW, Covid 19 Vaccine Operational Guidelines, Updated Dec. 28, 2020, https://www.mohfw.gov.in/covid_vaccination/vaccination/important-information.html.
- [9] MOHFW, Information Regarding Covid 19, Updated Feb. 17, 2021, Vaccine, https://www.mohfw.gov.in/covid_vaccination/vaccination/faqs.html#about-the-vaccine